DEPARTMENT OF ECOLOGY Air Quality Program Flagging Memo

February 21, 2019

TO: Sean Lundblad, SWRO & Air Quality Operations Unit Supervisor

FROM: Jacob Berkey, Air Quality Planner,

CC: Ecology: Nancy Pritchett, Jason Alberich, Laurie Hulse-Moyer, Farren Herron-

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Benton Clean Air Agency: Robin Priddy

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Yakima Regional Clean Air Agency: Keith Hurley and Hasan Tahat Spokane Regional Clean Air Agency: Julie Oliver and Margee Chambers

SUBJECT: Informational Flagging Request for Wildfire Affected PM2.5, PM10, and Ozone

during 2018.

The Exceptional Event Rule (EER) provides two data qualifier codes:

- Request Exclusion flags (R).
- Informational Only Flags (I).

Agencies use I flags for informational data and R flags for data points intended for an Air Quality System (AQS) exclusion request. I flags are initially used to identify values believed to have been affected by an event, yet may not be ready for exceptional events demonstration or exclusion request.

During August of 2018 the State of Washington experienced significant wildfire smoke events, which blanketed the state and resulted in exceedances of PM2.5, PM10, and Ozone. The contributing wildfires were in California, Oregon, and British Columbia, with additional wildfires burning here in Washington. The attached mosaics, newspaper articles and blog posts illustrate the scope and nature of the events.

To meet the EER requirements, Ecology's Air Quality Program Policy and Planning Section requests you to place an I flag on all data in AQS associated with the wildfire affected PM2.5, PM10 and Ozone exceedances during 2018. The requested locations and dates are listed on the attached spreadsheet.

Exceedances for 2018 I-Flags

Site	AQS ID	Paramete r Code	Parameter	PO C	Date	Value	Units	Fla g
Kennewick-S Clodfelter	53- 005- 0003	44201	Ozone	1	20180809	0.071	ppm	IT
Kennewick-S Clodfelter	53- 005- 0003	44201	Ozone	1	20180816	0.085	ppm	IT
Kennewick-S Clodfelter	53- 005- 0003	44201	Ozone	1	20180822	0.073	ppm	IF
Vancouver-NE 84th Ave	53- 011- 0024	88101	PM2.5 - Local Conditions	5	20180815	46	ug/m 3	IT
Vancouver-NE 84th Ave	53- 011- 0024	88101	PM2.5 - Local Conditions	5	20180820	43	ug/m 3	IF
Vancouver-NE 84th Ave	53- 011- 0024	88101	PM2.5 - Local Conditions	5	20180821	49	ug/m 3	IF
Vancouver-NE 84th Ave	53- 011- 0024	88101	PM2.5 - Local Conditions	5	20180822	49	ug/m 3	IF
Vancouver-NE 84th Ave	53- 011- 0024	88101	PM2.5 - Local Conditions	5	20180814	47	ug/m 3	IT
Issaquah- Lake Sammamish	53- 033- 0010	44201	Ozone	1	20180822	0.074	ppm	IF
North Bend	53- 033- 0017	44201	Ozone	1	20180730	0.081	ppm	IT
North Bend	53- 033- 0017	44201	Ozone	1	20180809	0.072	ppm	IT
North Bend	53- 033- 0017	44201	Ozone	1	20180815	0.071	ppm	IT
North Bend	53- 033- 0017	44201	Ozone	1	20180822	0.073	ppm	IF

Enumclaw- Mud Mtn	53- 033- 0023	44201	Ozone	1	20180808	0.079	ppm	ΙΤ
Enumclaw- Mud Mtn	53- 033- 0023	44201	Ozone	1	20180809	0.077	ppm	ΙΤ
Enumclaw- Mud Mtn	53- 033- 0023	44201	Ozone	1	20180815	0.074	ppm	ΙΤ
Enumclaw- Mud Mtn	53- 033- 0023	44201	Ozone	1	20180822	0.079	ppm	IF
Seattle-10th & Weller	53- 033- 0030	88101	PM2.5 - Local Conditions	5	20180814	59	ug/m 3	IT
Seattle-10th & Weller	53- 033- 0030	88101	PM2.5 - Local Conditions	5	20180815	56	ug/m 3	IT
Seattle-10th & Weller	53- 033- 0030	88101	PM2.5 - Local Conditions	5	20180819	36	ug/m 3	IF
Seattle-10th & Weller	53- 033- 0030	88101	PM2.5 - Local Conditions	5	20180820	67	ug/m 3	IF
Seattle-10th & Weller	53- 033- 0030	88101	PM2.5 - Local Conditions	5	20180821	102	ug/m 3	IF
Seattle-10th & Weller	53- 033- 0030	88101	PM2.5 - Local Conditions	5	20180822	96	ug/m 3	IF
Seattle-10th & Weller	53- 033- 0030	88101	PM2.5 - Local Conditions	5	20180824	39	ug/m 3	ΙΤ
Seattle-10th & Weller	53- 033- 0030	88101	PM2.5 - Local Conditions	5	20180825	41	ug/m 3	IT
Seattle- Duwamish	53- 033- 0057	88101	PM2.5 - Local Conditions	3	20180814	55	ug/m 3	IT
Seattle- Duwamish	53- 033- 0057	88101	PM2.5 - Local Conditions	3	20180815	51	ug/m 3	IT

Seattle- Duwamish	53- 033- 0057	88101	PM2.5 - Local Conditions	3	20180820	68	ug/m 3	IF
Seattle- Duwamish	53- 033- 0057	88101	PM2.5 - Local Conditions	3	20180821	105	ug/m 3	IF
Seattle- Duwamish	53- 033- 0057	88101	PM2.5 - Local Conditions	3	20180822	98	ug/m 3	IF
Seattle- Duwamish	53- 033- 0057	88101	PM2.5 - Local Conditions	3	20180823	36	ug/m 3	IT
Seattle- Duwamish	53- 033- 0057	88101	PM2.5 - Local Conditions	3	20180824	43	ug/m 3	IT
Seattle- Duwamish	53- 033- 0057	88101	PM2.5 - Local Conditions	3	20180825	42	ug/m 3	ΙΤ
Seattle- Beacon Hill	53- 033- 0080	88101	PM2.5 - Local Conditions	3	20180814	57	ug/m 3	IT
Seattle- Beacon Hill	53- 033- 0080	88101	PM2.5 - Local Conditions	1	20180815	51	ug/m 3	ΙΤ
Seattle- Beacon Hill	53- 033- 0080	88101	PM2.5 - Local Conditions	3	20180815	53	ug/m 3	IT
Seattle- Beacon Hill	53- 033- 0080	88101	PM2.5 - Local Conditions	3	20180819	38	ug/m 3	IF
Seattle- Beacon Hill	53- 033- 0080	88101	PM2.5 - Local Conditions	3	20180820	70	ug/m 3	IF
Seattle- Beacon Hill	53- 033- 0080	88101	PM2.5 - Local Conditions	1	20180821	88	ug/m 3	IF
Seattle- Beacon Hill	53- 033- 0080	88101	PM2.5 - Local Conditions	3	20180821	97	ug/m 3	IF
Seattle- Beacon Hill	53- 033- 0080	88101	PM2.5 - Local Conditions	3	20180822	98	ug/m 3	IF

Seattle- Beacon Hill	53- 033- 0080	88101	PM2.5 - Local Conditions	1	20180824	38	ug/m 3	ΙΤ
Seattle- Beacon Hill	53- 033- 0080	88101	PM2.5 - Local Conditions	3	20180824	37	ug/m 3	IT
Seattle- Beacon Hill	53- 033- 0080	88101	PM2.5 - Local Conditions	3	20180825	40	ug/m 3	IT
Kent-Central & James	53- 033- 2004	88101	PM2.5 - Local Conditions	3	20180814	61	ug/m 3	IT
Kent-Central & James	53- 033- 2004	88101	PM2.5 - Local Conditions	3	20180815	49	ug/m 3	IT
Kent-Central & James	53- 033- 2004	88101	PM2.5 - Local Conditions	3	20180819	50	ug/m 3	IF
Kent-Central & James	53- 033- 2004	88101	PM2.5 - Local Conditions	3	20180820	73	ug/m 3	IF
Kent-Central & James	53- 033- 2004	88101	PM2.5 - Local Conditions	3	20180821	74	ug/m 3	IF
Kent-Central & James	53- 033- 2004	88101	PM2.5 - Local Conditions	3	20180822	72	ug/m 3	IF
Bremerton- Spruce	53- 035- 0007	88101	PM2.5 - Local Conditions	3	20180820	77	ug/m 3	IF
Bremerton- Spruce	53- 035- 0007	88101	PM2.5 - Local Conditions	3	20180821	96	ug/m 3	IF
Bremerton- Spruce	53- 035- 0007	88101	PM2.5 - Local Conditions	3	20180822	81	ug/m 3	IF
Bremerton- Spruce	53- 035- 0007	88101	PM2.5 - Local Conditions	3	20180824	36	ug/m 3	IT
Ellensburg- Ruby St	53- 037- 0002	88101	PM2.5 - Local Conditions	5	20180809	38	ug/m 3	IT

Ellensburg- Ruby St	53- 037- 0002	88101	PM2.5 - Local Conditions	5	20180813	54	ug/m 3	IF
Ellensburg- Ruby St	53- 037- 0002	88101	PM2.5 - Local Conditions	5	20180814	78	ug/m 3	IT
Ellensburg- Ruby St	53- 037- 0002	88101	PM2.5 - Local Conditions	5	20180815	70	ug/m 3	IT
Ellensburg- Ruby St	53- 037- 0002	88101	PM2.5 - Local Conditions	5	20180816	47	ug/m 3	IT
Ellensburg- Ruby St	53- 037- 0002	88101	PM2.5 - Local Conditions	5	20180818	48	ug/m 3	IF
Ellensburg- Ruby St	53- 037- 0002	88101	PM2.5 - Local Conditions	5	20180819	109	ug/m 3	IF
Ellensburg- Ruby St	53- 037- 0002	88101	PM2.5 - Local Conditions	5	20180820	102	ug/m 3	IF
Ellensburg- Ruby St	53- 037- 0002	88101	PM2.5 - Local Conditions	5	20180823	36	ug/m 3	IT
Omak-Colville Tribe	53- 047- 0013	88101	PM2.5 - Local Conditions	5	20180810	48	ug/m 3	IT
Omak-Colville Tribe	53- 047- 0013	88101	PM2.5 - Local Conditions	5	20180811	61	ug/m 3	IF
Omak-Colville Tribe	53- 047- 0013	88101	PM2.5 - Local Conditions	5	20180812	47	ug/m 3	IF
Omak-Colville Tribe	53- 047- 0013	88101	PM2.5 - Local Conditions	5	20180813	100	ug/m 3	IF
Omak-Colville Tribe	53- 047- 0013	88101	PM2.5 - Local Conditions	5	20180814	68	ug/m 3	IT
Omak-Colville Tribe	53- 047- 0013	88101	PM2.5 - Local Conditions	5	20180815	84	ug/m 3	IT

Omak-Colville Tribe	53- 047- 0013	88101	PM2.5 - Local Conditions	5	20180816	84	ug/m 3	IT
Omak-Colville Tribe	53- 047- 0013	88101	PM2.5 - Local Conditions	5	20180817	93	ug/m 3	IT
Omak-Colville Tribe	53- 047- 0013	88101	PM2.5 - Local Conditions	5	20180818	236	ug/m 3	IF
Omak-Colville Tribe	53- 047- 0013	88101	PM2.5 - Local Conditions	5	20180819	261	ug/m 3	IF
Omak-Colville Tribe	53- 047- 0013	88101	PM2.5 - Local Conditions	5	20180820	94	ug/m 3	IF
Omak-Colville Tribe	53- 047- 0013	88101	PM2.5 - Local Conditions	5	20180821	58	ug/m 3	IF
Omak-Colville Tribe	53- 047- 0013	88101	PM2.5 - Local Conditions	5	20180822	78	ug/m 3	IF
Omak-Colville Tribe	53- 047- 0013	88101	PM2.5 - Local Conditions	5	20180823	112	ug/m 3	IT
Omak-Colville Tribe	53- 047- 0013	88101	PM2.5 - Local Conditions	5	20180824	116	ug/m 3	IT
Omak-Colville Tribe	53- 047- 0013	88101	PM2.5 - Local Conditions	5	20180825	125	ug/m 3	IT
Omak-Colville Tribe	53- 047- 0013	88101	PM2.5 - Local Conditions	5	20180826	40	ug/m 3	IT
Mt Rainier- Jackson Visitor Center	53- 053- 0012	44201	Ozone	1	20180815	0.074	ppm	IT
Mt Rainier- Jackson Visitor Center	53- 053- 0012	44202	Ozone	1	20180816	0.074	ppm	IT
Mt Rainier- Jackson Visitor Center	53- 053- 0012	44201	Ozone	1	20180822	0.074	ppm	IF

Tacoma-S 36th	53- 053- 0024	88101	PM2.5 - Local Conditions	5	20180814	59	ug/m 3	ΙΤ
Tacoma-S 36th	53- 053- 0024	88101	PM2.5 - Local Conditions	5	20180815	50	ug/m 3	IT
Tacoma-S 36th	53- 053- 0024	88101	PM2.5 - Local Conditions	5	20180820	91	ug/m 3	IF
Tacoma-S 36th	53- 053- 0024	88101	PM2.5 - Local Conditions	5	20180821	86	ug/m 3	IF
Tacoma-S 36th	53- 053- 0024	88101	PM2.5 - Local Conditions	5	20180822	83	ug/m 3	IF
Tacoma-S 36th	53- 053- 0024	88101	PM2.5 - Local Conditions	5	20180824	39	ug/m 3	IT
Tacoma-L St	53- 053- 0029	88101	PM2.5 - Local Conditions	3	20180814	58	ug/m 3	IT
Tacoma-L St	53- 053- 0029	88101	PM2.5 - Local Conditions	3	20180815	49	ug/m 3	IT
Tacoma-L St	53- 053- 0029	88101	PM2.5 - Local Conditions	3	20180819	46	ug/m 3	IF
Tacoma-L St	53- 053- 0029	88101	PM2.5 - Local Conditions	1	20180820	81	ug/m 3	IF
Tacoma-L St	53- 053- 0029	88101	PM2.5 - Local Conditions	3	20180820	86	ug/m 3	IF
Tacoma-L St	53- 053- 0029	88101	PM2.5 - Local Conditions	1	20180821	80	ug/m 3	IF
Tacoma-L St	53- 053- 0029	88101	PM2.5 - Local Conditions	3	20180821	81	ug/m 3	IF
Tacoma-L St	53- 053- 0029	88101	PM2.5 - Local Conditions	1	20180822	82	ug/m 3	IF

Tacoma-L St	53- 053- 0029	88101	PM2.5 - Local Conditions	3	20180822	83	ug/m 3	IF
Tacoma-L St	53- 053- 0029	88101	PM2.5 - Local Conditions	1	20180824	38	ug/m 3	ΙΤ
Tacoma-L St	53- 053- 0029	88101	PM2.5 - Local Conditions	3	20180824	37	ug/m 3	ΙΤ
Anacortes-202	53- 057- 0011	88101	PM2.5 - Local Conditions	5	20180814	50	ug/m 3	ΙΤ
Anacortes-202	53- 057- 0011	88101	PM2.5 - Local Conditions	5	20180815	44	ug/m 3	ΙΤ
Anacortes-202	53- 057- 0011	88101	PM2.5 - Local Conditions	5	20180820	79	ug/m 3	IF
Anacortes-202	53- 057- 0011	88101	PM2.5 - Local Conditions	5	20180821	111	ug/m 3	IF
Anacortes-202	53- 057- 0011	88101	PM2.5 - Local Conditions	5	20180822	85	ug/m 3	IF
Anacortes-202	53- 057- 0011	88101	PM2.5 - Local Conditions	5	20180825	39	ug/m 3	ΙΤ
Lynnwood- 212th	53- 061- 0005	88101	PM2.5 - Local Conditions	3	20180814	54	ug/m 3	ΙΤ
Lynnwood- 212th	53- 061- 0005	88101	PM2.5 - Local Conditions	3	20180815	48	ug/m 3	ΙΤ
Lynnwood- 212th	53- 061- 0005	88101	PM2.5 - Local Conditions	3	20180820	77	ug/m 3	IF
Lynnwood- 212th	53- 061- 0005	88101	PM2.5 - Local Conditions	3	20180821	93	ug/m 3	IF
Lynnwood- 212th	53- 061- 0005	88101	PM2.5 - Local Conditions	3	20180822	93	ug/m 3	IF

Lynnwood- 212th	53- 061- 0005	88101	PM2.5 - Local Conditions	3	20180825	40	ug/m 3	IT
Darrington-Fir St	53- 061- 0020	88101	PM2.5 - Local Conditions	3	20180813	42	ug/m 3	IF
Darrington-Fir St	53- 061- 0020	88101	PM2.5 - Local Conditions	3	20180814	96	ug/m 3	IT
Darrington-Fir St	53- 061- 0020	88101	PM2.5 - Local Conditions	3	20180815	53	ug/m 3	IT
Darrington-Fir St	53- 061- 0020	88101	PM2.5 - Local Conditions	3	20180819	55	ug/m 3	IF
Darrington-Fir St	53- 061- 0020	88101	PM2.5 - Local Conditions	3	20180820	105	ug/m 3	IF
Darrington-Fir St	53- 061- 0020	88101	PM2.5 - Local Conditions	3	20180821	103	ug/m 3	IF
Darrington-Fir St	53- 061- 0020	88101	PM2.5 - Local Conditions	3	20180822	95	ug/m 3	IF
Darrington-Fir St	53- 061- 0020	88101	PM2.5 - Local Conditions	3	20180823	52	ug/m 3	IT
Darrington-Fir St	53- 061- 0020	88101	PM2.5 - Local Conditions	3	20180825	36	ug/m 3	IT
Marysville-7th	53- 061- 1007	88101	PM2.5 - Local Conditions	3	20180814	53	ug/m 3	ΙΤ
Marysville-7th	53- 061- 1007	88101	PM2.5 - Local Conditions	3	20180815	54	ug/m 3	IT
Marysville-7th	53- 061- 1007	88101	PM2.5 - Local Conditions	3	20180820	75	ug/m 3	IF
Marysville-7th	53- 061- 1007	88101	PM2.5 - Local Conditions	3	20180821	99	ug/m 3	IF

Marysville-7th	53- 061- 1007	88101	PM2.5 - Local Conditions	3	20180822	94	ug/m 3	IF
Marysville-7th	53- 061- 1007	88101	PM2.5 - Local Conditions	3	20180823	46	ug/m 3	IT
Marysville-7th	53- 061- 1007	88101	PM2.5 - Local Conditions	3	20180825	47	ug/m 3	IT
Cheney- Turnbull	53- 063- 0001	44201	Ozone	1	20180823	0.073	ppm	IT
Spokane- Augusta	53- 063- 0021	88101	PM2.5 - Local Conditions	5	20180808	39	ug/m 3	IT
Spokane- Augusta	53- 063- 0021	88101	PM2.5 - Local Conditions	5	20180810	38	ug/m 3	IT
Spokane- Augusta	53- 063- 0021	88101	PM2.5 - Local Conditions	5	20180813	72	ug/m 3	IF
Spokane- Augusta	53- 063- 0021	88101	PM2.5 - Local Conditions	5	20180814	67	ug/m 3	ΙΤ
Spokane- Augusta	53- 063- 0021	88101	PM2.5 - Local Conditions	5	20180815	59	ug/m 3	IT
Spokane- Augusta	53- 063- 0021	88101	PM2.5 - Local Conditions	5	20180816	52	ug/m 3	ΙΤ
Spokane- Augusta	53- 063- 0021	88101	PM2.5 - Local Conditions	5	20180819	185	ug/m 3	IF
Spokane- Augusta	53- 063- 0021	88101	PM2.5 - Local Conditions	5	20180820	150	ug/m 3	IF
Spokane- Augusta	53- 063- 0021	88101	PM2.5 - Local Conditions	5	20180821	50	ug/m 3	IF
Spokane- Augusta	53- 063- 0021	88101	PM2.5 - Local Conditions	5	20180822	49	ug/m 3	IF

Spokane- Augusta	53- 063- 0021	88101	PM2.5 - Local Conditions	5	20180823	62	ug/m 3	IT
Spokane- Augusta	53- 063- 0021	81102	PM10 Total 0-10um STP	3	20180819	221	ug/m 3	IF
Spokane- Augusta	53- 063- 0021	81102	PM10 Total 0-10um STP	3	20180820	180	ug/m 3	IF
Spokane- Greenbluff	53- 063- 0046	44201	Ozone	1	20180810	0.072	ppm	IT
Spokane- Greenbluff	53- 063- 0046	44201	Ozone	1	20180815	0.072	ppm	IT
Spokane- Greenbluff	53- 063- 0046	44201	Ozone	1	20180816	0.08	ppm	IT
Spokane- Greenbluff	53- 063- 0046	44201	Ozone	1	20180823	0.074	ppm	IT
Colville-E 1st	53- 065- 0005	81102	PM10 Total 0-10um STP	3	20180819	289	ug/m 3	IF
Yelm-Northern Pacific	53- 067- 0005	44201	Ozone	1	20180821	0.071	ppm	IF
Burbank- Maple	53- 071- 0006	81102	PM10 Total 0-10um STP	3	20180819	186	ug/m 3	IF
Burbank- Maple	53- 071- 0006	81102	PM10 Total 0-10um STP	3	20180820	195	ug/m 3	IF
Custer-Loomis	53- 073- 0005	44201	Ozone	1	20180808	0.071	ppm	IT
Custer-Loomis	53- 073- 0005	44201	Ozone	1	20180821	0.071	ppm	IF
Bellingham- Pacific St	53- 073- 0019	88101	PM2.5 - Local Conditions	5	20180814	48	ug/m 3	IT

Bellingham- Pacific St	53- 073- 0019	88101	PM2.5 - Local Conditions	5	20180820	79	ug/m 3	IF
Bellingham- Pacific St	53- 073- 0019	88101	PM2.5 - Local Conditions	5	20180821	94	ug/m 3	IF
Bellingham- Pacific St	53- 073- 0019	88101	PM2.5 - Local Conditions	5	20180822	116	ug/m 3	IF
Bellingham- Pacific St	53- 073- 0019	88101	PM2.5 - Local Conditions	5	20180823	40	ug/m 3	ΙΤ
Yakima-4th Ave S	53- 077- 0009	88101	PM2.5 - Local Conditions	5	20180813	60	ug/m 3	IF
Yakima-4th Ave S	53- 077- 0009	88101	PM2.5 - Local Conditions	5	20180814	59	ug/m 3	ΙΤ
Yakima-4th Ave S	53- 077- 0009	88101	PM2.5 - Local Conditions	5	20180815	56	ug/m 3	ΙΤ
Yakima-4th Ave S	53- 077- 0009	88101	PM2.5 - Local Conditions	5	20180816	56	ug/m 3	ΙΤ
Yakima-4th Ave S	53- 077- 0009	88101	PM2.5 - Local Conditions	5	20180819	132	ug/m 3	IF
Yakima-4th Ave S	53- 077- 0009	88101	PM2.5 - Local Conditions	5	20180820	102	ug/m 3	IF
Yakima-4th Ave S	53- 077- 0009	88101	PM2.5 - Local Conditions	1	20180821	44	ug/m 3	IF
Yakima-4th Ave S	53- 077- 0009	88101	PM2.5 - Local Conditions	5	20180821	47	ug/m 3	IF
Yakima-4th Ave S	53- 077- 0009	88101	PM2.5 - Local Conditions	5	20180822	48	ug/m 3	IF
Yakima-4th Ave S	53- 077- 0009	88101	PM2.5 - Local Conditions	5	20180823	51	ug/m 3	IT

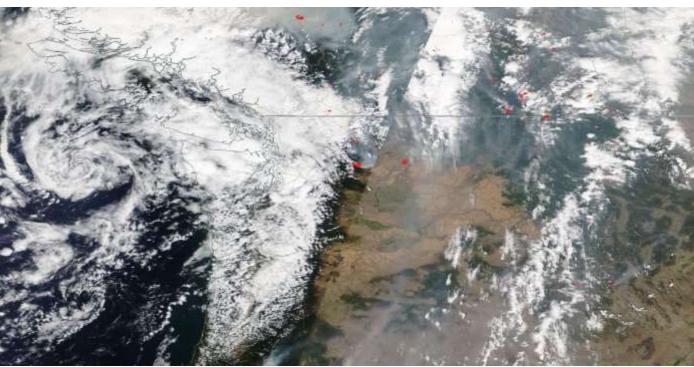
Toppenish	53- 077- 0015	88101	PM2.5 - Local Conditions	5	20180813	52	ug/m 3	IF
Toppenish	53- 077- 0015	88101	PM2.5 - Local Conditions	5	20180814	57	ug/m 3	ΙΤ
Toppenish	53- 077- 0015	88101	PM2.5 - Local Conditions	5	20180815	50	ug/m 3	ΙΤ
Toppenish	53- 077- 0015	88101	PM2.5 - Local Conditions	5	20180816	56	ug/m 3	IT
Toppenish	53- 077- 0015	88101	PM2.5 - Local Conditions	5	20180819	138	ug/m 3	IF
Toppenish	53- 077- 0015	88101	PM2.5 - Local Conditions	5	20180820	125	ug/m 3	IF
Toppenish	53- 077- 0015	88101	PM2.5 - Local Conditions	5	20180821	45	ug/m 3	IF
Toppenish	53- 077- 0015	88101	PM2.5 - Local Conditions	5	20180822	45	ug/m 3	IF
Toppenish	53- 077- 0015	88101	PM2.5 - Local Conditions	5	20180823	56	ug/m 3	IT

Satellite images of wildfire smoke over Washington State August 8 through 11, 2018









Satellite images of wildfire smoke over Washington State August 12 through 15, 2018









Satellite images of wildfire smoke over Washington State August 16 through 19, 2018









Satellite images of wildfire smoke over Washington State August 20 through 23, 2018









Day 2 of Whatcom's smoky haze — how dangerous is it, and when will it go away?

August 14, 2018 | Bellingham Herald, The: Web Edition Articles (WA)

Author: David Rasbach, Bellingham Herald |

Section: local 446 Words

Whatcom County seems to be stuck in a dream — no matter how hard we try, or where we look, we're surrounded in a foggy haze.

For the second straight day, the region has been enveloped in a thick, nasty cloud of smoke, limiting vision of our beautiful surroundings and turning sunlight into an ominous red.

Though we've gotten smoke from other sources this summer, such as California and Siberia, Northwest Clean Air Agency communications manager Seth Preston said most of the latest batch is the product of wildfires burning in western Canada. According to a story by the Vancouver Sun, there are nearly 600 fires burning in British Columbia.

Whatcom County is definitely feeling the effects.

As of 5 a.m. Tuesday, Whatcom air quality ranged from "unhealthy" to "unhealthy for sensitive groups," according to the Department of Ecology's Washington Air Monitoring Network.

The Bellingham air monitoring station checked in with an "unhealthy" Washington Air Quality Advisory rating of 153, including a fine particulate count of 42. The Custer-Loomis station was "unhealthy for sensitive groups" with a rating of 118 and a particulate count of 25.9, while Maple Falls was slightly worse with a rating of 149 and a 34.6 particulate count.

"People need to take care of themselves and their families," Preston said Monday. "There are things people can do when air quality is poor, such as not mowing the lawn, except maybe in the morning or evening when it's cooler and air quality levels aren't so bad. ... If you are having problems breathing, call the local health department or other medical experts."

The National Weather Service Seattle office offered these tips for dealing with the smoke:

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- « Be aware of current air quality conditions.
- « Check on people who may be sensitive to the smoke, especially those with lung or heart diseases.
- « Stay indoors if possible.
- « Keep windows and doors closed.
- « Use an air cleaner with a HEPA filter.

0814 Haze embed1

The good news is this round of smoke and haze may not stick around much longer.

According to a tweet from the National Weather Service, "Conditions are expected to improve late Tuesday night and Wednesday as surface flow shifts onshore."

0814 Haze embed2

For Bellingham, the weather service is predicting the haze to clear Tuesday night, with sunny skies predicted for Wednesday through Saturday and high temperatures ranging from 81 on Wednesday to 76 the rest of the week.

0814 Haze embed3

Map shows smoke drifting over Pacific Northwest from multiple wildfires Amap generated from satellite imagery shows the spread of wildfire smoke across the Pacific Northwest and the forecast for Tuesday, Aug. 14. Air quality in the region ranged from unhealthy for sensitive groups to moderate.

CITATION

David Rasbach, Bellingham Herald, 'Day 2 of Whatcom's smoky haze — how dangerous is it, and when will it go away?', Bellingham Herald, The: Web Edition Articles (online), 14 Aug 2018 https://infoweb.newsbank.com/apps/news/document-view? p=AWNB&docref=news/16DCC7D39DCAA1F8> 1/29/2019

Smoke, but less of it, may stick around Seattle for the weekend -The weather service says the smoke won't be as bad as this past week, but that it will carry into the weekend.

August 23, 2018 | Seattle Times, The: Web Edition Articles (WA) Author: Agueda Pacheco-Flores | Section: Environment 466 Words

Just when people in the Seattle area thought the haze was over, it has rolled and could add a thin layer of smoke to the weekend. But it isn't expected be as thick as what we just experienced, according to the National Weather Service in Seattle.

Weather Service meteorologist Dana Felton said the haze returned due to two factors: low-level, west and southwesterly winds, which were pulling smoke from the Maple fire in the Olympics over the Seattle metro area, and an upper-level trough moving northwesterly that pulled smoke down from the fires on Vancouver Island, B.C.

If the wind shifts again and blows down from due north, we could see a return of the heavy smoke from mainland British Columbia next week.

Felton said that the smoke this weekend shouldn't be as bad as this past week, but that it could carry into next week.

With the possibility of longer-term smoke exposure, public health experts are urging all people — not just those in sensitive groups — to limit exposure.

Sverre Vdeal, a physician with the University of Washington Department of Environmental and Occupational Health Sciences, said the consequences of long-term exposure to wildfire smoke on people are not yet clear, though scientists are currently analyzing data gathered during the 2017 wildfires.

"We do know though that the cumulative effect of long term exposure has a greater impact on health than just a single day," he said.

Julie Fox, an air quality specialist with the state Department of Health, said wildfire smoke is known to have an impact on people over 65 with pre-existing conditions, such as lung disease and cardiovascular disease. She said there is also growing evidence that it has an impact on children, pregnant woman who may risk preterm birth,

https://infoweb.newsbank.com/apps/news/document-view?p=AWNB&t=pubname%3ASTWES%21Seattle%2BTimes%252C%2BThe%253A%2BWeb...

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1/29/2019 Document View | Access World News | NewsBank people with diabetes and people who have a history of strokes.

"The more we learn about this, the more the list of people we are worried about keeps growing and growing," she said. "It makes it hard because our message now is 'We are worried about you and you and you and you.""

Vdeal said that, perhaps surprisingly, early study results suggest that it's not the elderly most affected by the smoke, but middle-aged and younger people who were hospitalized as a result of it.

Nobody knows why, he said, but there is speculation that younger, healthier people may dismiss the risks and continue their outdoor activities.

Liz Coleman, a spokeswoman for the Environmental Public Health Division of the Department of Health, said her agency saw an increased need for medical care among young healthy adults during one of our extended stretches of hot weather.

She said she wondered then whether it was because younger people may feel invulnerable.

"They might think, 'It's not going to affect me. I can still go out and run five miles'," Coleman said.

CITATION

Agueda Pacheco-Flores, Seattle Times staff reporter, 'Smoke, but less of it, may stick around Seattle for the weekend - The weather service says the smoke won't be as bad as this past week, but that it will carry into the weekend.', *Seattle Times, The: Web Edition Articles* (online), 23 Aug 2018 https://infoweb.newsbank.com/apps/news/document-view? p=AWNB&docref=news/16E03D361A7CD688>

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Smoky air returns to Seattle through at least Wednesday - Thick smoke from wildfires raging in British Columbia and in the eastern portion of the state is expected to spread into western Washington starting Sunday.

August 19, 2018 | Seattle Times, The: Web Edition Articles (WA) Author: Michelle Baruchman | Section: Environment 252 Words

The National Weather Service in Seattle has issued an Air Quality Alert for Western Washington, as wildfire smoke returns to the Puget Sound.

Thick smoke from wildfires raging in British Columbia and in the eastern portion of the state started to spread into Western Washington on Sunday. By evening, poor visibility was causing some flights to be delayed at SeattleTacoma International Airport, according to the Federal Aviation Administration. The NWS advisory runs through 5 p.m. Wednesday.

High winds and low humidity may contribute to igniting wildfires to start the week, the weather service said on its website.

The Environmental Protection Agency has advised that everyone, and particularly people with heart or lung disease, older adults and children, should avoid "prolonged or heavy exertion" and outdoor activities. The agency forecasts its air-quality index, which measures levels of the most harmful particulate matter in the air, to reach 151 in the Seattle area on Monday, well into the unhealthy category by federal standards. The index posted a reading of 76, or "acceptable" as of 2 p.m.

People who are sensitive to poor air quality may experience symptoms of itchy, irritated eyes, sore throats and coughs.

In Washington state this year, 13 large wildfires have burned more than 211 square miles. In Seattle last week, air quality was worse than in some of the world's most polluted cities.

2018 marks one of the hottest and driest summers on record for the Puget Sound area. Researchers predict the region will experience more smoky weeks in coming years.

CITATION

https://infoweb.newsbank.com/apps/news/document-view?p=AWNB&t=pubname%3ASTWES%21Seattle%2BTimes%252C%2BThe%253A%2BWeb... 1/2 1/29/2019
Document View | Access World News | NewsBank

Michelle Baruchman, Seattle Times staff reporter, 'Smoky air returns to Seattle through at least Wednesday - Thick smoke from wildfires raging in British Columbia and in the eastern portion of the state is expected to spread into western Washington starting Sunday.', *Seattle Times, The: Web Edition Articles* (online), 19 Aug 2018 https://infoweb.newsbank.com/apps/news/document-view?? p=AWNB&docref=news/16DE95FB0C3FBA18>

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Weekend lightning, wind spread wildfires across Washington state - Almost 9,000 firefighters and support personnel are trying to put out fires burning across more than 250,000 acres of land in Washington and Oregon.

August 12, 2018 | Seattle Times, The: Web Edition Articles (WA) Author: Benjamin Romano | Section: Environment 617 Words

Lightning strikes over the weekend sparked dozens of Washington state wildfires. Strong winds spread new and existing ones, even as the cooler, wetter weather provided temporary aid to fire crews in some areas.

There are two dozen large fires in Washington and Oregon involving 256,451 acres, the Northwest Interagency Coordination Center (NWCC) said Sunday morning.

More than 8,580 people, including firefighters and support personnel, are assigned to fight the blazes.

Washington recorded more than 180 lightning strikes over the 24 hours that ended at 8 a.m. Sunday, as thunderstorms rolled across the Northwest. Strong winds fanned flames across an already dry landscape.

In some areas west of the Cascade Mountains, rain, cooler temperatures and increased humidity provided temporary aid to firefighting efforts.

The near-term weather forecast calls for more thunderstorms and associated elevated fire risk in Eastern Washington on Wednesday afternoon and Thursday. For most of Washington and Oregon, fire danger is "well above average for this time of year," NWCC said.

Here's the latest on some of the state's biggest fires:

Grass Valley: The fire is burning across 45,000 acres west of Grand Coulee Dam, Grant County. It's zero percent contained, and involves 100 firefighters and support personnel.

The fire was reported late Saturday morning and quickly grew as a wind-driven flame wall stretched as far as 12 miles across the hot, dry grasslands.

Firefighters focused on defending buildings in the fire's path. One firefighter was injured and taken to Harborview Medical Center. There are an estimated 150 homes adjacent to the active fire area.

Evacuation orders remained in effect Sunday for parts of Grand Coulee, Electric City and Coulee Dam.

Cougar Creek: The fire is burning across 25,695 acres near Chelan, Chelan County. It's 5 percent contained, and involves 1,190 firefighters and support personnel.

Caused by lightning on July 28, the fire is demonstrating "extreme behavior," burning uphill in timber lands and threatening structures, according to NWCC.

Residents near the town of Ardenvoir along Mad River and Entiat River roads have been ordered to evacuate. Others in the area were told to prepare to evacuate.

Crescent Mountain: The fire is burning across 15,975 acres near Winthrop, Okanogan County. It's 12 percent contained, and involves 594 firefighters and support personnel.

The fire was sparked by lightning about 21 miles west of Twisp on July 29. As of Sunday morning, it was 13 miles from the town and 1.7 miles from the closest structure.

Residents in the area of Twisp River Road are advised to be ready to leave should authorities call for an immediate evacuation. The fire is predicted to move east, presenting a heightened chance of evacuations.

At least 20 new fires, ranging from less than an acre to more than 20 acres, were sparked by lightning in the Methow Valley Ranger District. One fire was 3 miles as the crow flies from the town of Mazama.

Smokejumpers, air tankers and other firefighting crews were responding to these new flare-ups.

Miriam: The fire is burning across 2,236 acres 2 miles east of White Pass Ski Area in the Goat Rocks Wilderness. It's 9 percent contained, and involves 354 firefighters and support personnel.

Firefighters continued to focus on protecting structures at the ski area and search for areas to fight the fire along the rugged east flank of the wilderness area.

Sheep Creek: The fire is burning across 458 acres northwest of Northport, Stevens County. It's 70 percent contained, and involves 320 firefighters and support personnel.

Fire spotters detected two new fires nearby on Saturday. One, the West Hubbard fire, was 10 to 15 acres in size on Sunday. Another, the Horns fire, has grown to at least 200 acres. Fire crews were trying to gain access to the fires Sunday.

• CITATION

Benjamin Romano, Seattle Times staff reporter, 'Weekend lightning, wind spread wildfires across Washington state - Almost 9,000 firefighters and support personnel are trying to put out fires burning across more than 250,000 acres of land in Washington and Oregon.', *Seattle Times, The: Web Edition Articles* (online), 12 Aug 2018 https://infoweb.newsbank.com/apps/news/document-view? p=AWNB&docref=news/16DC4700C7656ECO>

Smoky air forces closures Splash pads offer respite but Spokane shutters city pools amid health alerts

August 9, 2018 | Spokesman-Review, The (Spokane, WA)
Author: Kip Hill and Rebecca White The Spokesman-Review |

Page: 001A 657 Words

Smoky conditions closed Spokane's free swimming pools Wednesday as temperatures climbed and wildfires continued to burn around the region.

The Spokane Parks Department issued a notification to users of the municipal aquatics centers Wednesday morning that the city's six pools would be closed until air quality conditions returned to healthy levels. Readings at monitoring stations in north Spokane were in the unhealthy category Wednesday, with choking conditions expected to persist until Friday.

Due to air quality improvements later in the day, A.M. Cannon, Hillyard, Shadle and Liberty pools reopened for evening swim, but not lessons. The Comstock and Witter pools remained closed due to lack of available staff, according to a Spokane Parks Department tweet.

Fianna Dickson, city park spokeswoman, said staff would continue to monitor conditions.

"If air quality does dip down below 150, we can call in staff and open them up again," Dickson said. Those interested in the status of area pools can call the aquatics hotline at (509) 625-6960 for up-to-date information on pool closures.

A Browne's Addition summer concert in Coeur d'Alene Park was also canceled due to the unhealthy air quality and heat. According to a news release, the concert, featuring the band Flight Risk, will be rescheduled for Aug. 30.

But forecasters warned earlier this week scorching temperatures mixed with a high pressure system over the area could mean lingering smoke from Washington and Canadian wildfires for several days to come. An air quality alert issued by the National Weather Service is in place until 10 a.m. Friday.

Bryce Williams, a meteorologist with the National Weather Service in Spokane, said if temperatures reach their predicted high Thursday, they may match the 1898 record of 103 degrees. He said he doesn't expect this week's temperatures to surpass Spokane's hottest temperature, 108 degrees on Aug. 4, 1961, but they may get close to other recorded highs.

"We're going to be flirting with the records across the region," Williams said.

He said temperatures are expected to drop 15 to 20 degrees this weekend as dry, gusty winds move into the area. However, those conditions have led to a red flag warning going into the weekend, with winds and lightning threatening to spread existing fires and cause new ignition events.

"We want to encourage our citizens to take advantage of the locations provided to help them stay cool during this period of extremely hot weather," said Spokane Mayor David Condon in a statement. "And we ask people to check on their more vulnerable neighbors who might not have air conditioning."

Splash pads at the city's public parks will be open from 9 a.m. to 8 p.m. to provide relief, said Dickson. Those water features can be found at 17 parks throughout the city. A map can be found at the parks website. The Parks Department urges visitors to use discretion when taking children and other vulnerable groups to the splash pads during extreme weather, Dickson said.

Cooling centers will be available at the city's public libraries, open 10 a.m. to 6 p.m., and at the House of Charity downtown as well.

Heidi Roop, the lead scientist for science communication at the University of Washington Climate Impacts Group, said due to rising temperatures, dry conditions and forest management, wildfire season is predicted to last longer than it has in the past. She said the number and severity of fires are increasing as well, which is influenced by a variety of factors.

"The overall trend for all of Washington and for the Northwest is bigger and more frequent fires," she said.

One of the fires closest to Spokane, the Angel Springs fire, burned more than 5,000 acres and destroyed four structures and 10 outbuildings over the course of a week. The fire, which started about 7 miles northeast of Davenport, Washington, threatened 170 structures, according to an Eastern Area incident management team news release.

By 3:30 p.m. Wednesday, the fire was 35 percent contained, according to a Department of Natural Resources tweet.

CITATION

Kip Hill and Rebecca White The Spokesman-Review, 'Smoky air forces closures Splash pads offer respite but Spokane shutters city pools amid health alerts', *Spokesman-Review, The* (online), 9 Aug 2018 001A https://infoweb.newsbank.com/apps/news/documentview?p=AWNB&docref=news/16DB0AFD32E61B08

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Fire tagged as key culprit in smoky skies started July 29 Containment of blaze west of Twisp put at 34 percent; NASA posts plume images

August 24, 2018 \mid Spokesman-Review, The (Spokane, WA)

Author: Jonathan Glover The Spokesman-Review |

Page: 001A 381 Words

One of Washington's largest and longest-burning wildfires continues to grow in central Washington, forcing evacuations and sending spires of smoke into the atmosphere.

The Crescent Mountain fire, which began July 29 about 21 miles west of Twisp in Okanogan County, has grown to about 33,000 acres as it continues its westward trek, said Todd Schroeder, information officer for the fire.

On Aug. 17 and again on Tuesday, Okanogan County Emergency Management called for mandatory evacuations for a total of 179 residences in wooded areas west of town. The postings remained in place Thursday.

The slow-moving fire has drawn statewide concern as smoke from it and another fire burning nearby - the McLeod fire, burning at 17,000 acres - has blanketed much of the state. As winds pushed east Thursday through the evening, meteorologists predicted more smoke from the two blazes would settle into Eastern Washington.

The fire has even drawn national - or in this case, planetary - attention. On Tuesday, NASA posted a satellite photo showing the fire's unique impact on what is already one of the state's worst air quality seasons.

"Washington's Crescent Mountain fire is spewing copious amounts of smoke into the atmosphere," the space agency said. "This NASA image shows the huge plume rising from the fire and drifting along the jet stream. The skies above Washington state continue to be obscured by this smoke and the smoke from other fires around the state, as well as from Oregon and California wildfires."

Schroeder said firefighters have been able to contain about 34 percent of the fire, though winds Wednesday night and Thursday contributed to more growth. Thursday morning, he said the western

edge was sitting on Scaffold Peak west of Twisp but hadn't yet moved toward the valley, where there are structures and homes.

So far, no structures have been lost and no injuries are reported.

"The fire is up high on the peak," he said. "Crews are just trying to keep it there."

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The McLeod fire, Schroeder said, is 5 percent contained. A total of 538 fire personnel worked on it Thursday.

Due to wind and heavy wildfire smoke, Schroeder said crews haven't been able to rely on aircraft support. If it clears, he said they planned on attacking it from the air with helicopters.

CITATION

Jonathan Glover The Spokesman-Review, 'Fire tagged as key culprit in smoky skies started July 29 Containment of blaze west of Twisp put at 34 percent; NASA posts plume images', *Spokesman-Review, The* (online), 24 Aug 2018 001A https://infoweb.newsbank.com/apps/news/document-view?p=AWNB&docref=news/16DFFB7F368CC860

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Suffocating smoke Area fires create unhealthy breathing conditions that will likely stick around for rest of the week

August 14, 2018 | Spokesman-Review, The (Spokane, WA)
Author: Rachel Sun, Chad Sokol and Nick Deshais The Spokesman-Review | Page: 001A 1148 Words

Wildfire smoke that has blanketed northeastern Washington and North Idaho, creating unhealthy breathing conditions, is expected to linger through much of the week, experts said.

Many air quality monitors, including ones in Spokane, Wellpinit, Omak, Twisp, Ritzville and Sandpoint, were reading in the "unhealthy" category Monday morning. Lisa Woodard, a spokeswoman for the Spokane Regional Clean Air Agency, said the influx of smoke had resulted in the worst air quality so far this year.

The wind has been blowing into Spokane from the northeast, bringing smoke from fires in Canada, Montana and North Idaho, said Joey Clevenger, a meteorologist with the National Weather Service in Spokane.

While some smoke at higher altitudes may blow farther south, Steven Van Horn, another weather service meteorologist, said air conditions probably wouldn't improve much for several days. That's due to a lack of strong winds and temperature inversions - layers of warm air trapped beneath layers of cold air - that are holding smoke close to the ground, he said.

"There might be a little improvement, but I don't expect there to be a massive improvement in air quality," Van

Horn said. "The smoke is probably going to linger throughout the week."

The air quality in Spokane was bad last week, too. It was measured in the unhealthy category on Wednesday and Thursday, though as of Sunday, a whole 24-period had not averaged in the unhealthy category, Woodard said.

The 24-hour average air quality on Thursday and Friday, however, was in the "unhealthy for sensitive groups" category.

Jennifer Semenza, a spokeswoman for Providence Sacred Heart Medical Center, said the hospital had seen a small yet insignificant increase in the number of patients complaining of respiratory problems.

"Most people with conditions irritated by poor air quality are likely seeking treatment from their primary care physician first rather than coming into the emergency department," Semenza said in an email.

The emergency room at MultiCare Deaconess Hospital, as well as MultiCare's urgent care centers, also saw "moderate" increases in the number of asthma patients during the past week, said Kevin Maloney, a hospital spokesman.

"That's due not only to the smoke that we've had, but also the heat," Maloney said. "It sounds like it's specifically affecting people who had the asthma condition already."

MultiCare's Valley Hospital, meanwhile, reported that its uptick in respiratory patients was about average for this time of year, Maloney said.

The weather service is forecasting "widespread haze" at least through Sunday. The temperature is expected to be in the 80s today before heading back into the 90s on Wednesday and Thursday.

Spokane's summer also continues to be drier than normal. There has been no rain in August, compared to the normal amount through Aug. 13 of 0.21 of an inch. In July, 0.06 of an inch of rain fell in Spokane, compared to the normal of 0.64 of an inch. In June, Spokane had 0.55 of an inch of rain compared to the normal of 1.25 inches.

Staying indoors

The city of Spokane announced Monday it would again close its six municipal pools until air quality levels drop below the unhealthy category. Up-to-date swimming information can be obtained by calling the city's aquatics hotline at (509) 625-6960.

The smoke didn't stop some people from enjoying city parks, however. Children were playing Monday afternoon on the big red wagon in Riverfront Park.

At the Wonderland Family Fun Center on North Division Street, outdoor attractions including the gocarts and miniature golf course were all but abandoned. Parents and caregivers kept their children indoors to avoid the smoke.

Rose Dussell, a nanny from Spokane, accompanied 4-year-old Sullivan Bryant as he ran from one arcade game to the next, gleefully throwing balls, slamming buttons and racing a plastic motorcycle on virtual courses.

The arcade is one of few kid-friendly entertainment options when it's smoky outside, Dussell said. She went there when smoke clouded the area last year, too.

"We would usually go biking, but that's out of the question," she said.

Heather Whitney, a mother visiting from Seattle, said her family would prefer to spend time outdoors, somewhere like Manito Park.

"We want to be outside," Whitney said. "I want my 9-year-old to get exercise."

But it's more important that her son, Grey, isn't exposed to the smoke, she said. So they opted for laser tag.

"You have to be more creative," she said.

Anthony Hattrup, the general manager at Wonderland, said he was encouraging customers to stay indoors. Over the course of a busy day, several hundred people might use the outdoor attractions, but on Monday most elected to stay indoors, he said.

"If someone wants to go outside, we'll do it for them, but I'm also not going to have my employee out there all day," Hattrup said. "If (an employee) just can't handle the outside, we're not going to make them be out there because it's not exactly the healthiest."

Jobs to be done

Ben Parriman and his team of landscapers were busy Monday hauling boulders into the yard of a house in

Spokane's Perry District - one step in a weekslong project to replace the thirsty lawn with drought-resistant plants. The homeowner is seeking to conserve water to get a special rebate on their utility bill, Parriman said.

When the wildfire smoke was bad last year, the landscapers wore filtration masks to keep the hazardous particles out of their lungs, Parriman said. But on Monday, the masks sat unused in his pickup truck.

"I notice the smoke a lot more in the morning, but as the day goes on I think we just get used to it," said Parriman, who owns a landscaping company called Ground FX.

Landscaper Jacob Mayfield said the smoke was unpleasant, but probably wouldn't stop them from completing the work.

"If it really started to cause us problems, we would probably just pack it up," Mayfield said.

If anything, the heat might be an obstacle. Parriman said the crew took Friday off because of temperatures that soared above 100 degrees.

Likewise, Mike Schimmels, the owner of Red Diamond Construction, said members of his road construction crew don't wear masks or take other precautions against the foul air because they're used to dire conditions.

"We're used to working around the dust and everything, so it really doesn't bother us," said Schimmels, whose company is working on the renovation of North Monroe Street.

Years ago, Shimmels wore a face mask during particularly dusty days, but he shed that safety measure.

"I guess I got immune to it," he said.

Schimmels said he feels worse for his asphalt crew that is working with tarry sand and gravel that gets as hot as 300 degrees.

"They're working on that in the heat of the day," he said.

As for the smoky conditions that are becoming an August mainstay, Schimmels said he and his crew aren't the only ones who will be getting used to it.

"I think this is kind of the future for everyone," he said.

CITATION

Rachel Sun, Chad Sokol and Nick Deshais The Spokesman-Review, 'Suffocating smoke Area fires create unhealthy breathing conditions that will likely stick around for rest of the week', *Spokesman-Review, The* (online), 14 Aug 2018 001A

https://infoweb.newsbank.com/apps/news/document-view?p=AWNB&docref=news/16DCB0A76410AA80

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BURN BAN IN LOWER VALLEY: EXPECT MORE OF THE SAME - Murky skies

linger over Valley as wildfires burn - Murky skies linger as wildfires burn - ATF investigating one of four suspicious fires in Yakima

August 10, 2018 | Yakima Herald-Republic (WA)
Author: Colton Redtfeldt and PHIL FEROLITO | Page: 1A | Section: Local News,
Community 518 Words

Wildfire smoke continues to blanket the Yakima Valley, and the outlook for relief is hazy.

Officials banned outdoor burning in the Lower Yakima Valley on Thursday, and extended an air quality alert because of wildfires in the region.

The smoke coming from the Miriam Fire in the White Pass area is a major contributor to poor air quality, said

Sanjay Barik, Department of Ecology central regional air quality section manager. Air quality in Yakima, Toppenish and White Swan was unhealthy for sensitive groups as of Thursday afternoon, according to the state air monitoring website.

The air won't get better "until we get a better handle on that fire; that's the major factor there," Barik said.

The Cougar Creek Fire near Chelan and the Gilbert-Crescent Mountain Fire near Winthrop also are producing smoke in the region.

An air quality alert has been extended until 10 a.m. Saturday, according to the National Weather Service.

"A windy and cooler weekend is likely in Eastern Washington, reducing smoke accumulation in most areas but also worsening fire spread," the interagency Washington Smoke Information blog said.

Winds from the west of about 18 mph are expected to sweep through the area Friday evening, but that could send more smoke into the Valley, according to the National Weather Service in Pendleton, Ore.

There's a chance the wind won't clear smoke out of the Valley as effectively as nearby areas because of topography, said Ranil Dhammapala, a forecaster for the state Department of Ecology. He said any smoke cleared probably will be replaced by more smoke from growing fires in the area.

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Burn ban

Because of the smoke and poor air dispersion, the Yakima Regional Clean Air Agency enacted a Stage 1 burn ban in the lower Yakima County on Thursday. The ban means no outdoor burning in the Lower Valley, but officials are asking everyone to refrain from outdoor burning countywide.

Although the skies are tinted with smoke, officials cannot simply enact a burn ban based on air quality. However, the Yakima County fire marshal could enact a burn ban based on fire risk.

Under rules established by the state Department of Ecology, the clean air agency can only issue a burn ban when air pollution is projected to reach 30 micrograms or more of particulate matter per cubic meter over the next 48 hours. Bans aren't issued on current conditions, but on projections, said Keith Hurley, who oversees the Yakima Clean Air Agency.

"It's not what it's doing today, it's what it's doing 48 to 72 hours out," he said.

While particulate matter has remained about 18 micrograms per cubic meter in Yakima, levels were as high as 40 micrograms in Sunnyside on Tuesday and Wednesday. A ban wasn't called then because the agency wasn't able to project those numbers ahead of time, Hurley said.

The burn ban will be re-evaluated at 3 p.m. Friday.

The Lower Valley is also getting smoke from wildfires in Oregon, while the Upper Valley has been insulated from that smoke, he said. Inside and online

^{*} Up-to-date information on air quality can be found at bit.ly/YHR-AirQuality and yakimaherald.com.

* For an update on the Miriam Fire, see Page 3A.

• CITATION

Colton Redtfeldt and PHIL FEROLITO, 'BURN BAN IN LOWER VALLEY: EXPECT MORE OF THE SAME Murky skies linger over Valley as wildfires burn Murky skies linger as wildfires burn ATF investigating one of four suspicious fires in Yakima', *Yakima HeraldRepublic* (online), 10 Aug 2018 1A https://infoweb.newsbank.com/apps/news/document-view? p=AWNB&docref=news/16DDF2383B8E23B8>

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Washington Smoke Blog, two most hit posts in 2018.

<u>Tell us plainly: when will the smoke clear?</u> Aug 20, 2018, 32 comments. 49556 page views.

<u>Very Large Smoke Plumes Across Pacific Northwest</u> Aug 18, 2018, 26 comments. 37279 page views.